

REMARKS

The Applicants thank the Examiner for the careful examination of this application. Claims 1 – 7 are pending and rejected.

Claim 1 positively recites forming a coating comprising a dopant over a surface of the semiconductor substrate and heating the semiconductor substrate to cause a portion of the dopant to diffuse from the coating into the semiconductor substrate. Claim 1 also positively recites that at 1000° C the impurity atom is a faster diffusing species relative to silicon atoms. These advantageously claimed features are not taught or suggested by the patent granted to Maszara et al.

Maszara et al. teaches away from the advantageously claimed invention because Maszara et al. requires the implantation of the dopant species ions (column 3 lines 30-40; column 6 lines 48-50; column 7 lines 11-20). Therefore Maszara et al. does not teach the diffusion of dopant from a coating into the semiconductor substrate as advantageously claimed.

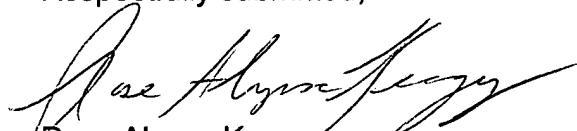
In addition, Maszara et al. teaches away from the advantageously claimed invention because Maszara et al. teaches that annealing at temperatures above 700° C deactivates the dopant species (column 4 lines 50-53, column 5 lines 32-36). Maszara et al. emphasizes this teaching by stating that the remaining fabrication steps are performed at a strictly controlled thermal budget that is equal to or below the 600-700° C low temperature anneal step (column 4 lines 63-67; column 5 lines 33-40; column 7 lines 1-3 and 38-42). Therefore Maszara et al.

does not teach that at 1000° C the impurity atom is a faster diffusing species relative to silicon atoms as advantageously claimed.

Therefore, the Applicants respectfully traverse the Examiner's rejection of Claim 1 and respectfully assert that Claim 1 is patentable over Maszara et al. Furthermore, Claims 2-7 are allowable for depending on allowable independent Claim 1 and, in combination, including limitations not taught or described in the reference of record.

For the reasons stated above, this application is believed to be in condition for allowance. Reexamination and reconsideration is requested.

Respectfully submitted,



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